

PLANNING & DEVELOPMENT DIVISION REQUEST FOR EXPERT ASSISTANCE

Tracking Information

Requesting Professionals: John Zahina, Senior Environmental Scientist

Requesting Department: Water Supply Department

Project Name: **Peer Review Panel:** Proposed Minimum Level Criteria for Lake Istokpoga

Date: May 13, 2005

Introduction/Background

It is the intent of the South Florida Water Management District (District) to ensure that all planning documents produced by staff are based on sound scientific principles and information. This draft document represents the District's ongoing contributions towards developing a technical definition of Minimum Flows and Levels (MFLs) for Lake Istokpoga. Towards these ends, the District seeks to obtain an objective and expert peer review of the draft document entitled: "*Technical Documentation to Support Development of Minimum Levels for Lake Istokpoga*" (MFL document), dated May 2005.

Pursuant to Section 373.042, Florida Statutes (F.S.), Water Management Districts must establish Minimum Flows and Levels for aquifers and surface water bodies. The minimum level for a given water body shall be the limit at which further withdrawals would be significantly harmful to the water resource or ecology of the area. Specific MFL technical criteria will be established through a state rule development and rule making process, and will be implemented through a multifaceted program of water resource development projects, operations, research and regulation. This peer review is limited to issues regarding establishment of the technical criteria and not to the related implementation process. The District seeks objective review of the technical basis for MFL criteria only (based on best available information); policy decisions and assumptions are not subject to peer review.

In developing minimum flows and levels for water bodies within the jurisdiction of the District, the agency adopted a narrative definition of "significant harm" as it relates to statute Chapter 40E-8.021(24), Florida Administrative Code (F.A.C.).

"Significant harm" means the temporary loss of water resource functions which result from a change in surface or ground water hydrology that

takes more than 2 years to recover, but which is considered less severe than serious harm. The specific water resource functions addressed by a MFL and the duration of the recovery period associated with significant harm are defined for each priority water body based on the MFL technical support document (Chapter 40E-8.021(24), Florida Administrative Code)

The District also developed specific technical criteria to reflect the significant harm standard for Lake Istokpoga as proposed in Chapter 6 of the draft document. The purpose of the MFL Document is to summarize the scientific or technical data, methodologies, concepts and related assumptions used to develop the proposed MFL, based on the *best available information*.

Objectives

This Statement of Work for panelists is designed to organize an independent scientific peer review pursuant to Section 373.042, F.S. The peer review will be conducted in a manner allowing public participation through a public workshop with the panelists. As part of this public process, as required by law, all substantive communications between the panelists regarding this peer review must be conducted through the public process. Florida Sunshine Law prohibits phone conversations and/or meetings between two or more of the panelists outside of the public's access. Reviewers will be provided specific instructions regarding this process. Beth Ross, Senior Specialist Attorney for Office of Counsel, will be available to answer any specific questions you may have regarding legal issues. Ms. Ross may be contacted by phone at (561) 682-6257, or via e-mail at brross@sfwmd.gov.

The scope of the peer review, under the statute, is very broad with regard to technical or scientific issues. Any scientific assumption, data, and/or modeling results, including assumptions in models, used in the development of the technical criteria are subject to review. However, District Governing Board policy decisions and assumptions are not subject to peer review. The following section is provided to clarify the role of the peer review panel. Staff will also provide further guidance or information on this issue to individual panel members upon their request.

Scope of Work: Policy versus Technical Issues

The responsibility of the peer review panel is to review technical or scientific data, methodologies, and conclusions used in the development of the MFL criteria. The term “technical” is key in understanding the scope of this process. Inherent in developing the proposed criteria is the application of “policies” and interpretations of the MFL statute. These policy considerations are only within the authority of the District's Governing Board, and should be viewed as assumptions or conditions for the technical review. As a result, it is important to clearly delineate which issues are policy-based and which are within the scope of the technical peer review.

Generally, four types of policy decisions or assumptions were applied in developing the MFL criteria, as described below.

A. Protection of Water Resource Functions

In establishing MFLs, the District must identify and consider the relevant water resource functions of the water body. These functions are set forth in state law and listed in Chapter 1 of the MFL Document. Specific water resource functions for defining significant harm to Lake Istokpoga were identified based on their relevance to the level of protection assigned to the significant harm standard, their applicability to the regional nature of the MFL, and the broad scope of District responsibilities under the authorizing statutes. A description of these relevant resource functions for Lake Istokpoga is set forth in Chapter 3 of the MFL document.

B. Identification of Baseline Resource Conditions: Statutory “Considerations”

Another type of policy assumption or decision made in the development of the proposed MFL is the definition of the reference point or baseline condition of the subject water resources for which significant harm is to be determined. In establishing MFLs, the Governing Board may consider changes and structural alterations to watersheds, surface waters and aquifers and the effects such changes or alterations have had, on the hydrology of an affected watershed, surface water or aquifer (Section 373.0421(1)(a)), F.S. For example, large drainage systems have been constructed throughout central and south Florida and development of residential areas has occurred in these drained areas. As a result, in setting a MFL for any remaining natural areas, the Governing Board may also consider the impacts of such drainage and the hydrological limitations that now exist in the system in order to continue to provide flood protection. In such a situation, the Governing Board may establish the MFL based on the needs of the impacted natural system, instead of the pre-development conditions. Significant harm is then determined based on how the MFL may impact the water resource function of the water body. Although the peer review panel may not necessarily agree with the policy assumptions made under this statute, it is essential that the peer review be conducted in light of any of these assumptions. The considerations under this statute and how they were applied in developing the proposed Lake Istokpoga MFL are discussed in Chapter 3 of the MFL document.

C. Level of Protection Provided by the “Significant Harm” Standard

The definition of “significant harm” is also based on previous Governing Board policy decisions and assumptions that are beyond the scope of this peer review. To provide an understanding of this definition, a description of the relevant legal and policy assumptions is provided in Chapter 1 of the MFL document. The applicable narrative definition of “significant harm” is as follows:

“Significant harm” means the temporary loss of water resource functions which result from a change in surface or ground water hydrology that

takes more than 2 years to recover, but which is considered less severe than serious harm. (Chapter 40E-8.021(24), F.A.C.)

The purpose of the MFL document is to identify the technical or scientific MFL criteria based on this definition of “significant harm.” The role of the peer review panel is to review the technical or scientific data, methodologies, and assumptions used in developing the specific MFL for Lake Istokpoga.

D. Minimum Flow and Level Versus Restoration

The Minimum Level developed for Lake Istokpoga is intended to prevent further degradation or significant harm to the resource. This differs from the concept of “restoration”, which seeks to return a portion of the lake to some pre-existing historical condition. When reviewing the MFL document, the Peer Review Panel should be aware that the scope of this project is limited to development of the Minimum Level to protect the existing resource and does not include restoration. It should be noted that as other projects propose ecological enhancement or restoration plans, the Minimum Level may be revised through time to protect those enhanced or restored resource functions from significant harm.

Some Specifics on Review of Policy and Technical Issues

A list of technical issues considered relevant to the proposed MFL establishment is provided under Task 2 in the Statement of Work. The panel members may also propose additional technical issues. The following narrative outlines areas of the MFL document that pertain to the policy or technical aspects of establishing the MFL.

Chapter I summarizes the legal background of the MFL statute and framework of the related laws that apply to the District in Chapter 373, F.S. The panel members are requested to read this chapter and comment on any needed clarification or additional information that would help the reader better understand the logic and basis for the four types of policy decisions or assumptions discussed above. Referenced statutes and rules are provided in **Appendix A** of the technical document.

Chapter II provides a detailed description of Lake Istokpoga and the upstream watershed. Physical and hydrological attributes of the system are set forth, as well as a discussion of the water resource issues affecting the area. The panel members are requested to read this chapter and comment on any needed clarification or additional information that would help the reader better understand the logic and basis for the policy decisions or assumptions discussed above.

Chapter III provides a discussion of (a) key water resource functions of the system that were considered in the development of the MFL, (b) resource protection issues, (c) considerations and exclusions. This chapter is to be reviewed by the panel and comments provided.

Chapter IV identifies the technical or scientific “methods” used in developing the proposed MFL criteria. These “methods” are reviewable technical material and should be critiqued thoroughly by the panel.

Chapter V provides a summary of the scientific approach and technical relationships that were used to evaluate relationships between ecological stress and low water levels in Lake Istokpoga. Panel members should review this chapter using the same guidelines for policy versus technical issues as the guidelines set for the previous chapters.

Chapter VI presents the proposed definition of significant harm for Lake Istokpoga and a description of the proposed MFL criteria, based upon results presented in Chapter 5. Discussion of a MFL recovery and prevention plan, including implementation policies and procedure are also included. Panel members should review this chapter using the same guidelines for policy versus technical issues consistent with those set for the previous chapters.

Technical Appendices A – E provides supporting data and information for the technical criteria. These need to be reviewed for accuracy, relevance and completeness.

Scope of Work (Duties and Tasks of the Peer Review Panelist)

During this project the panelist will:

- Task 1:** Acknowledge receipt of review materials within 48 hours of delivery.
- Task 2:** Read the MFL document and prepare a *brief written review of the MFL document* prior to the workshop, including questions to be considered by the District staff in preparing for the workshop.
- Task 3:** Participate in a field trip where the expert will be given an overview of Lake Istokpoga. District staff will serve as guides. The itinerary for the trip will be made available to the panelists as soon as it is finalized.
- Task 4:**
 - a) Participate in the public workshop as a panelist June 28th, 2005 in the Sebring area, and participate in workshop discussion sessions
 - b) Assist in the organization and development of an outline for the **Final Panel Report** during an executive session following the public workshop on June 29th, 2005
- Task 5:** Collaborate with other panelists in writing the **Draft Final Panel Report** that will include summary, conclusions and specific recommendations following the guidelines provided regarding the public process. The final report will be submitted in hard copy and a pre-designated electronic format.

Task 6: **PANEL CHAIRPERSON ONLY** Assemble **Final Panel** Report and deliver to the District. The final report will be submitted in hard copy and a pre-designated electronic format. The Chairperson may be requested to provide a presentation to the Governing Board.

It is requested that all electronic correspondence provided to the District is compatible with Microsoft Word 97 or later version (XP version preferred).

For services rendered, each expert panelist will receive an honorarium. The Chairperson will receive a greater honorarium for taking additional responsibilities during the review and report preparation, and an additional honorarium if asked to present findings to the District's Governing Board.

Description of Expert Assistance Task (Work Breakdown)

Task 1: Acknowledgement of receipt of Review Materials

Within two days of receiving the materials, the expert will acknowledge receipt by contacting John Zahina via phone at 561-682-2824 or via e-mail at jzahina@sfwmd.gov.

Task 2: Review Background Materials, Write Preliminary Review and Prepare Questions for Staff

The expert will read and comment on the MFL document. This brief written review will also include issues and questions for District staff to investigate prior to discussion at the public workshop. This includes comments regarding the overall structure and layout of the document, the readability of both text and graphics, and the appropriateness of the document for its intended purpose. It is recommended that the expert becomes particularly familiar with the materials listed under their focus areas. Comments should focus on the adequacy of the document for describing management issues of the water body, relevance and accuracy of the topics discussed in the technical document, and soundness of the conclusions reached.

Review comments should address, but not be limited to, the **following general questions and technical issues:**

General Questions

1. Does the MFL document present a defensible scientific basis for setting initial minimum flows and levels within this water resource? Are the approaches or concepts described in the document scientifically sound based on "best available information"?

2. Are the proposed criteria logically supported by “best available information” presented in the main body of the document? What specific additions, deletions or changes are recommended by the expert to enhance the validity of the document?
3. Are there other approaches to setting the criteria that should be considered? Is there available information that has not been considered by the authors? If so, please identify specific alternatives to setting the MFLs and the data available to validate the alternative approach.

Specific **technical issues** to be evaluated by the Panel include:

- Completeness of the literature review and interpretations for the intended purpose
- Adequacy of data coverage and interpretations
- Appropriateness of selecting the existing wetland communities along Lake Istokpoga as the protected resource
- Adequacy of proposed MFL criteria to prevent “significant harm” to littoral wetlands during drought conditions

The expert is requested to provide specific recommendations to address any drawbacks or deficiencies in the evidence described in the MFL document for each water resource area. It is anticipated that the expert will place emphasis on technical issues and the water resource discipline most closely allied with his/her area of expertise. However, comments on any technical aspect of the document are welcome.

Task 3: Field Excursion – Ecosystem Overview

June 27th, 2005. Panelists will participate in an afternoon field trip where they will be given an overview of Lake Istokpoga. District staff will serve as guides. The itinerary for the trip will be made available to the Panel as soon as it is finalized.

Task 4: Public Workshop

Part 1. June 27th, 2005; Time 6:00 p.m. The expert will attend a one-hour organizational meeting of the Panel. In cooperation with District staff, the expert will participate in a discussion of the review meeting and its organization, and reach consensus on how to approach each session of the meeting to best assure that questions are answered and review objectives are met. The Chairperson will organize note taking for the public meeting and preliminary writing assignments for the Panel Report. District staff will provide instructions on open communication for panelists.

Part 2. June 28th, 2005; Time 9:00 a.m. to 5:00 p.m. The expert will participate in the workshop discussions and will ask critical questions of presenters, make suggestions and observations during the meeting, and facilitate discussion of questions posed. As part of the workshop, the Panel may be given presentations by the public with criticisms

of the criteria, and/or with proposed alternative approaches to setting criteria. Panelists are expected to evaluate any such information from the public in their report. *Questions and technical issues to be addressed during the review process are provided in Task 1.*

Part 3. June 29th, 2005 Time 9:00 a.m. to 5:00 p.m. The expert will participate in either an Executive Session with the other panelists or a continuation of the public meeting with staff and interested parties during the morning. For the afternoon, the panel will work in the Executive Session to draft an outline for the final panel report on the findings, conclusions and specific recommendations. Structure and attendance of these sessions is the sole responsibility of the Panel Chairperson.

Deliverable: Workshop participation and Draft Final Report or Outline from Panel.

A draft of the conclusions and recommendations will be provided to the panel in both a hardcopy and electronic format following the executive session for their use in drafting the final report. Also in this session, the panel will decide on report organization, writing editing and review processes.

District staff will support this effort as requested by the Panel Chairperson and computer resources will be made available.

Date Due: June 29th, 2005

Task 5: Draft Final Report – Panel Findings

The expert will cooperate with other panelists to author a report summarizing key facts presented during the workshop, including conclusions and recommendations on the subjects raised through meeting objectives and specific questions posed to presenters. Each panelist will provide input to the Panel Chairperson, who will assemble and quality assure the Final Report.

The Panel will address the *questions and technical issues* raised during the review process and in the preliminary reports identified under Task 1. The Panel is requested to provide specific recommendations to address any drawbacks or deficiencies in the evidence described in the MFL document for each resource area. It is anticipated that the expert will place emphasis on technical issues and the water resource function most closely allied with his/her area of expertise. However, comments on any technical aspect of the document are welcome. The Panel is also requested to develop a set of conclusions and recommendations from the presentations and deliberations during the workshop, as well as from their individual evaluations of the Minimum Flow and Levels document and background materials.

Panel concurrence on each topic is strongly recommended. In the event that the Panel Chairperson cannot reconcile a difference of opinion, then it may be reported as such or as a minority opinion.

Deliverable: Draft Final Report

Date Due: July 11th, 2005

**Task 6. Final Report; Assembly, Editing and Delivery to the District
PANEL CHAIRPERSON ONLY**

The panel chairperson will compile the final report, make any necessary changes, review the document for accuracy and completeness, conduct an internal panel review, get sign-off from panelists and assemble the final report for delivery to the District. The chairperson may also be asked to present a summary of the panelists' final report to the District's Governing Board.

Delivery: Final Report

Date Due: July 18th, 2005

Responsibilities of the Requesting Division

The Project Manager is John Zahina. He will:

- Provide background materials (if necessary) and a MFL document to each panelist
- Support the panel during the meeting (including computer equipment, etc. for preparation of the draft conclusions and recommendations)
- Conduct a review of the draft report and outline
- Organize the meeting in cooperation with the Panel Chair

Evaluation Criteria for Acceptance of Deliverables

Task 1. Successful completion of Task 1 will be when the Project Manager is notified that review materials have been received. Notification is to be by e-mail and/or phone contact within 48 hours of receipt.

Task 2. District staff will determine the adequacy of Task 2 completion based on the expert's preparedness and ability to discuss background information. The expert's questions, concerns and information needs should reflect a thorough review of background materials and thoughtful preparation for the meeting and resulting report.

Task 4. Successful participation in the meeting will be attained by active and professional involvement at the meeting, thoughtful interaction with other panelists and attendees and production of draft conclusions and recommendations that reflect professional and practical analysis of the information presented.

Task 5. Sections of the draft report delivered to the Chairperson in Task 4 will attest to the level of understanding of the current status issues surrounding setting minimum water level criteria. The draft input should reflect careful and objective professional observations, conclusions and recommendations on how the District should proceed. The narrative should contain explicit responses to all the questions and technical issues posed in the task description as well as a summary of key points made during each session of the meeting.

Task 6. Chair ONLY. District staff will determine the adequacy of Task 6 completion based on the Final Report. A satisfactory Final Report will be fully responsive to the input of District staff and comprehensive in providing coverage of the questions and issues posed by the District and those discussed at the public workshop. The report should be completely objective in its evaluation and written so that it can be understood and credible to a broad audience. A possible presentation of a summary of the Final Report to the District's Governing Board (in West Palm Beach) may be requested. The short presentation would include a brief outline of the peer review process and summary of conclusions and recommendations. The Project Manager shall provide support materials and guidelines for the development of the presentation as requested by the Chair; however, District staff shall not participate in the creation or editing of the content of the presentation.

Summary of Time Line and Responsibilities

Task	Responsible Party	Date Due
#1. Acknowledgement of receipt of review material	Panelist	48 Hours after receipt of materials
#2. Review background materials and MFL document, write preliminary review comments and questions for workshop	Panelist	June 26th, 2005
#3. Participation in field excursion	Panelist	June 27th, 2005
#4. Participate in public workshop	Panelist	June 28th, 2005
#5. Produce draft final report items	Panelist	July 11th, 2005
#6a. Produce Final Report	Chairperson	July 18th, 2005
#6b. Possible District Governing Board presentation	Chairperson	To Be Determined
Payment for services	Project manager	Upon receipt of invoice; Target Date early August 2005

Payment for Services: An honorarium will be paid to the panelists for participating in the meeting and report preparation. Payment will include: \$5,400.00 honorarium for each panelist; hotel and per diem to cover costs associated with lodging and meals; \$1,080 will be paid for the additional responsibilities of the Panel Chairperson (organizing, assembling, reviewing and delivering the draft and final reports); and an additional \$1,080.00 if the Chairperson is asked to present the findings of this panel to the District's Governing Board.

Requesting Department Approvals

Requesting Professional

John Zahina _____ Date _____

Requesting Professional's Supervisor or Division Director

Joel VanArman _____ Date _____

Planning and Resource Evaluation Division Director

John Mulliken _____ Date _____

Water Supply Department Director

Carlyn Kowalsky _____ Date _____